

1 of 7

Materials Technology

PROJECT NUMBER: 30161 08-92562.3.REV1

MATTRESS ID: 26F-3255-12 DATE: March 20, 2008

REVISION DATE: April 2, 2008

PAGE:

STORK TWIN CITY TESTING CORPORATION

662 Cromwell Avenue St. Paul, Minnesota 55114

OPEN FLAME EVALUATION CONDUCTED ON A MICHIGAN STATE INDUSTRIES MATTRESS ID: 26F-3255-12

IN ACCORDANCE WITH
CONSUMER PRODUCT SAFETY COMMISSION
16 CFR PART 1633
"STANDARD FOR THE FLAMMABILITY
(OPEN FLAME) OF MATTRESS SETS"

Prepared for:
MICHIGAN STATE INDUSTRIES
Attn: Mr. LANNY AKERS
3500 NORTH ELM
JACKSON, MI 49201

Prepared by:

Darious Smith

Engineering Technician

Product Evaluation Services

Reviewed by: Dennis & Schnick

Dennis Schneck Project Manager

Bedding Evaluation Services

Phone: (651) 659 - 7323

The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.



Materials Technology

PROJECT NUMBER: 30161 08-92562.3.**REV1 PAGE:** 2 of 7

MATTRESS ID: 26F-3255-12 DATE: March 20, 2008

REVISION DATE: April 2, 2008

OPEN FLAME EVALUATION – 16 CFR 1633

INTRODUCTION:

This report presents the results of a full scale 16 CFR 1633 open flame test conducted on the following:

PROJECT#:	20464.00.0	2562 Michigan Otata	Industrias
	30161 08-92562 Michigan State Industries		muusmes
TEST SEQUENCE #:	3		
TEST REQUESTOR: name:	LANNY AKERS		
address:	3500 North Elm		
	Jackson, MI 49201		
TEST CONFIGURATION:	Test Room - 12' x 10' x 8'		
PRODUCT MANUFACTURER or SUPPLIER:	Michigan State Industries		
PRODUCT ID MARKS & DESCRIPTION:	MATTRESS: 26F-3255-12		
Prototype ID:	WATE TO COOK 12		
MATTRESS: width x length x thickness (in):	39.00 x 75.00 x 6.00		
FOUNDATION: width x length x thickness (in):	x x		
CONDITIONING ROOM: temp ("F) / R.H. (%):	72.0 / 16		
BURN ROOM: temp ("F) / R.H. (%):	72.0 / 13		
TIME LAPSE: condition room to burner ignition (min):	16		
TOTAL INITIAL MASS (kg):	9.84		
TEST DATE:	03-14-2008		
COMMENTS:	FABRIC COLOR: LIGHT GREEN		
	VCC AT 3:26 INTO THE TEST		
Test Operator:	DARIOUS SMITH		
Witness:			
Test Results	Data	Criteria	Pass/Fail
Peak rate of heat release (k/V/):	21.7	200 KW	Pass
Time @ peak release (mm:ss):	00:50		-
Total heat released @ 10 min (MJ):	2.7	15.0 MJ	Pass

THE TEST SAMPLE MET THE REQUIREMENTS OF 16 CFR 1633



Materials Technology

PROJECT NUMBER: 30161 08-92562.3.**REV1 PAGE:** 3 of 7

MATTRESS ID: 26F-3255-12 DATE: March 20, 2008

REVISION DATE: April 2, 2008

OBSERVATIONS:

Time (mm : ss)	Observation	
00 : 00	Burner ON	
00 : 50	Side Burner OFF	
01 : 10	Top burner OFF	
03 : 26	All signs of combustion have ceased	
08 : 14	Test Completed	

STANDARD TEST PROCEDURE:

Unless stated otherwise in the introduction of this report, this test was conducted in accordance with Consumer Product Safety Commission 16 CFR Part 1633, test configuration B, the room-based configuration. A brief summary is detailed below:

The mattress / mattress set was allowed to condition for at least 48 hours in conditions compliant with Consumer Product Safety Commission 16 CFR Part 1633 (temperature: greater than 65°F and less than 77°F; relative humidity: less than 50%). The test area conditions also were also kept compliant with 16 CFR Part 1633 (temperature: greater than 59°F and less than 80.6°F; relative humidity: less than 75%). A time span of no more than 20 minutes was allowed between the mattress set leaving the conditioning room and burner ignition, this time was recorded and reported in the data table above.

The instrumentation was calibrated and zeroed prior to the evaluation. After the specimen was placed on the bed frame inside the test room, the burner alignment procedure was performed. Data logging and video were obtained for 2 minutes prior to burner ignition. The burner application time was 70 seconds for the top burner and 50 seconds for the side burner. Upon completion of the flame application times, the top burner was carefully lifted off of the mattress surface and the unit removed from the test room.

The test proceeded until either all combustion had ceased, 30 minutes had passed, or the development of a fire of such size as to require suppression for the safety of the facility.

REMARKS: Due to the nature of the test, the specimen was discarded upon completion of the procedure.



4 of 7

Materials Technology

PROJECT NUMBER: 30161 08-92562.3.REV1

MATTRESS ID: 26F-3255-12 DATE: March 20, 2008

REVISION DATE: April 2, 2008

PAGE:

Product:	Sample ID or Model#:		
Mattress polyester core sureheck 44"	MATTRESS ID: 26F-3255-12		
ADDITIONAL INFORMATION:			
Herculite surechek 44" ticking lot # 36216 produced by vender Aberdeen Rd. 100% polyester core produced by vender Legget & Platt, cumulus fibers, tracking ship date 2/5/2008 closed with bonded nylon thread. Mattress will be a prototype for this line of mattresses.	Fabric Color: LT. GREEN		
	Weight of Combustibles:		
	Mattress Dimensions: 39" x 75" x 6"	Foundation Dimensions: N/A	



5 of 7

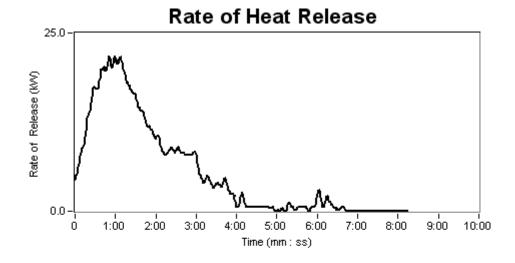
Materials Technology

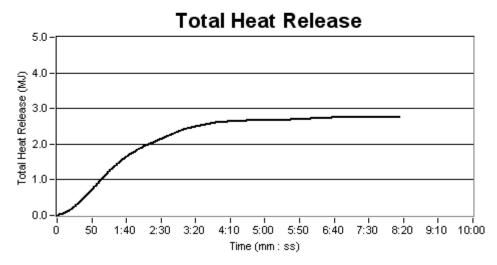
PROJECT NUMBER: 30161 08-92562.3.**REV1 PAGE:**

MATTRESS ID: 26F-3255-12 DATE: March 20, 2008

REVISION DATE: April 2, 2008

GRAPHS:







Materials Technology

PROJECT NUMBER: 30161 08-92562.3.REV1

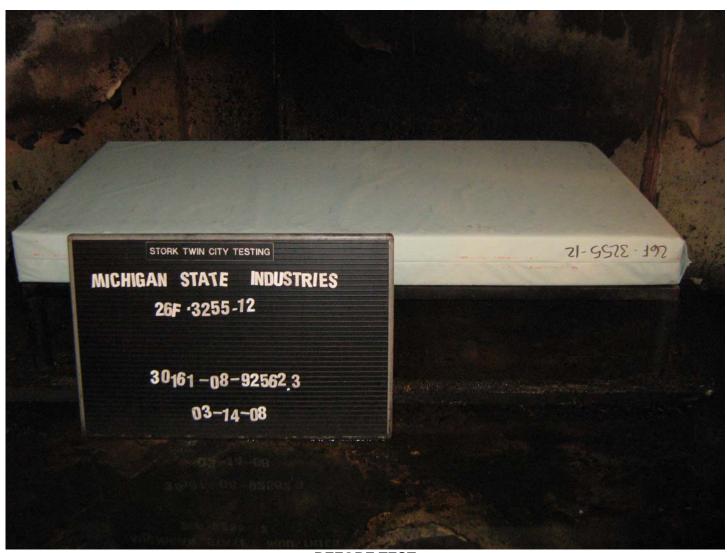
MATTRESS ID: 26F-3255-12

PAGE: 6 of 7

DATE: March 20, 2008

REVISION DATE: April 2, 2008

PHOTOS:



BEFORE TEST



Materials Technology

PROJECT NUMBER: 30161 08-92562.3.REV1

MATTRESS ID: 26F-3255-12

PAGE: 7 of 7

DATE: March 20, 2008

REVISION DATE: April 2, 2008



AFTER TEST